UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,857	01/24/2002	Raymond G. Wardell	BLD920010015	3785

22462 7590 09/30/2005

GATES & COOPER LLP
HOWARD HUGHES CENTER
6701 CENTER DRIVE WEST, SUITE 1050
LOS ANGELES, CA 90045

EXAMINER	
KANG, ROBERT N	

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/056,857	WARDELL ET AL.	
	Examiner	Art Unit	
	Robert N. Kang	2622	RNK

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☒ Claim(s) *6,16,26 and 30* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 January 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

TWYLER LAMB
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Figure 3 does not contain an item 304, the "imposition module." Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 6, 16, and 26 are objected to because of the following informalities: the second scenario of the claim, "or in a memory of a print server communicatively coupled between the print optimizer and the print server," is not physically possible. A device cannot be coupled between another device and itself. Examiner assumes the claims should read "between the print optimizer and printer." Appropriate correction is required.

3. Claim 30 objected to because of the following informalities: The claim states in line 1, "the program storage device of claim 9," when claim 9 clearly refers to a printing method. Examiner assumes that the claim is depending on claim 29, in keeping with the structure and format of the preceding 29 claims. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 11, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Dorfman (US-PAT 5,960,164).

In regards to claims 1, 11, and 21, Dorfman discloses a method of printing and printing system for printing impositioned documents, the system comprised of, as stated in column 3, lines 47-50, "a first computer remote from the second site containing an object association table which associates document production jobs with specific documents and appropriate object descriptions." Since this first computer is directly attached to the user interface (UI) and therefore, both the print command and the source document generation, this comprises "receiving source data." Additionally, the object association table, generated as print jobs are requested by the user, qualifies as "generating a second identifier associated with the resource, the second identifier locally recognizable by a printing device." Dorfman also describes in column 3, lines 55-61, "a

third computer remote from the second site ...[with] a job formatting table contained within the third computer ... to produce a print image stream specifically for controlling the specific print engine." Dorfman further clarifies the "job formatting table" in column 1, lines 53-55, "the data stream is of a format which is specific to a given printer, reflecting engine specific parameter such as resolution and imposition." Therefore the job formatting table as disclosed by Dorfman possesses "a first identifier ... describing a layout of the resource in the document." The second identifier, embodied within the object association table, is stored in computer one at the "second site," as disclosed by Dorfman, and thus is stored "remotely from the printer." The printer resource is sent to a fourth computer, described by Dorfman in column 3, lines 61-66, "at the first site connected to the specific print engine utilizing the print image stream from the third computer, along with other data, to control the specific print engine to print desired documents containing variable information provided from the second computer database information." Computer four is locally connected at the same site to the print engine. Thus, the Dorfman system stores "the resource locally to the printer," and prints "the stored resource according to the layout information." Specifically regarding claim 21, because Dorfman's system and method expressly anticipate the pending application, it is implicit that Dorfman's system anticipates the aforementioned method stored on a computer readable medium.

Regarding claims 2, 12, and 22, the applicant discloses on page 5, lines 28-29, "the print optimizer 302 also maintains and manages a database 324 which associates resource identifiers with AFP identifiers such as the resource name and object ID." The

first computer in Dorfman's printing system and method, containing the object association table, receives the source data and stores the second identifier. As shown in tables I an IA in column 6 of Dorfman's disclosure, the object association table associates resources with parameters such as the object ID, job ID, or object code. Therefore, the first computer as disclosed by Dorfman qualifies as a "print optimizer" which receives the source data "and the second identifier is stored in the print optimizer." Regarding the second limitation of claims 2, 12, and 22, "the job ticket is generated by an impositioning module," the first identifier for document formatting, contained in the job ticket, is generated in Dorfman's system by the third computer. As stated in the applicant's disclosure on page 6, lines 19-20, "the imposition module 304 generates job tickets describing the layout of the impositioned document." Since the third computer utilizes the aforementioned job formatting table to determine the layout of the impositioned print job, the third computer as disclosed by Dorfman qualifies as an "imposition module."

In regards to claims 3, 13, and 23, Dorfman does not expressly state the steps of generating the second identifier, embodied in the object association table, comprises "determining if the resource is a new resource," and "generating the second identifier and associating the second identifier with the resource only if the resource is a new resource." In fact, Dorfman does not disclose any of the operations in generating the object association table. However, the examiner asserts that in any look-up table or memory management program, new entries are only inserted into the table when identical resources have not been mapped. This method of updating a table is well

known with the computing industry and thus inherent in Dorfman's object association table. Thus the limitations of claims 3, 13, and 23 are anticipated by Dorfman's patent.

Regarding claims 4, 14, and 24, Dorfman's system, which inserts variable data to an impositioned document via a second computer, disclosed in lines 53-54 of column 3, utilizes a third computer for "translating the database information containing specific filenames from the second computer to produce a print image stream specifically for controlling the specific print image." Therefore, the data as sent from the second computer is not readable by the print engine, and is thus converted into a "printer renderable form."

In regards to claims 5, 15, and 25, "wherein the printer renderable form is compliant with a page description language," Dorfman discloses an XLC data system 13, communicably attached to the color raster-image-processor (CRIP) 13, which converts text and graphics files into a print image stream to be printed by print engine 17. As stated in column 8 of Dorfman's disclosure, "the XLC system 13

> processes text by pre-rasterizing only the fonts and characters. All variable data is built dynamically by the imaging system in the stream build process 23. Once a given font is downloaded into the system the printer can (theoretically) print with substantially no limitations related to the number of different text combinations. The XLC system 13 will pre-RIP all document pages as part of its internal job set up operation. The source of these documents can be any design application which can be generated as an EPS file; in fact it is expected that the document identification can actually be the file name of the original

design application." Broadly defined, a page description language (PDL) is any language renderable by a printer which describes the page layout, settings, and orientation. Thus, and EPS file (encapsulated post script) qualifies as a page description language. Therefore, the resource is converted to "a printer renderabel form compliant with a page description language."

With regards to claims 6, 16, and 26, the "resource," or source print data, in Dorfman's system, is contained within the "print image stream" produced by the third computer. The fourth computer, communicatively coupled to the print engine "utilizes the print image stream from the third computer," as stated by Dorfman in column 3, lines 61-64. Therefore, the print image stream is stored in computer four. Thus, in the case that the computer four is a part of the printer, and in the case that computer four is a print server, the "resource is stored in the memory of the printer or in a memory of a print server."

With regards to claims 7, 17, and 27, the same concept is utilized for the rejection of claims 3, 13, and 23. Look-up table or memory addressing tables with automatic updating, as opposed to immediate insertion, were well known within the art at the time of Dorfman's application. Therefore, it can be fairly asserted that Dorfman's system only stores the resource locally to the printer "only if the resource is not already stored locally to the printer."

In regards to claims 9, 19, and 29, Dorfman discloses in column 4, lines 24-40, "a method of setting up a system for a data publisher to provide data for a remote imaging system to print and merge the data in signatures which are combined into a document,

and where a number of documents are combined to produce a booklet. Thus the "impositioned document comprises variable data." Furthermore, Dorfman depicts in figure 4, step 40, a step for determining the variable data fields in a given print job. This is comparable to "augmenting the job ticket with the variable data."

With regards to claims 10, 20, and 30, Dorfman discloses in figures 3 and 4 a patented method for including variable data in impositioned documents. First the data is received by computer 24, which contains the object association table 21. Thus the "source data having a variable data tag" is accepted. Figure 4 diagrams a flow of operations occurring between the object association table 21 and the database publisher 11'. Step 41 in figure 4 indicates the process "specif[ies] variable data fields." Therefore, this qualifies as "a first identifier" associated with the "variable data tags." Step 51 in figure 4 of Dorfman's system is to "place variable fields in signatures." This qualifies as "replacing variable data tags with variable data or reference to the variable data." After the data has been replaced, step 53 of figure 4 transfers the database tables to the database publisher 11'. Therefore the job ticket generated by the second computer is augmented "with the variable data or reference to the variable data," since computer three as disclosed in column 3, line 55-60, "use[es] the database information supplied by the second computer and a job formatting table for translating the database information containing specific file names from the second computer to produce a print image stream."

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 8, 18, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorfman (US-PAT 5,960,164) in view of Shirakawa (US-PAT 5,926,825).

Dorfman discloses a method of printing and printing system for printing impositioned documents, the system comprised of, as stated in column 3, lines 47-50, "a first computer remote from the second site containing an object association table which associates document production jobs with specific documents and appropriate object descriptions." Since this first computer is directly attached to the user interface (UI) and therefore, both the print command and the source document generation, this comprises "receiving source data." Additionally, the object association table, generated as print jobs are requested by the user, qualifies as "generating a second identifier associated with the resource, the second identifier locally recognizable by a printing device." Dorfman also describes in column 3, lines 55-61, "a third computer remote from the second site ...[with] a job formatting table contained within the third computer ... to produce a print image stream specifically for controlling the specific print engine." Dorfman further clarifies the "job formatting table" in column 1, lines 53-55, "the data stream is of a format which is specific to a given printer, reflecting engine specific parameter such as resolution and imposition." Therefore the job formatting table as

disclosed by Dorfman possesses "a first identifier ... describing a layout of the resource in the document." The second identifier, embodied within the object association table, is stored in computer one at the "second site," as disclosed by Dorfman, and thus is stored "remotely from the printer." The printer resource is sent to a fourth computer, described by Dorfman in column 3, lines 61-66, "at the first site connected to the specific print engine utilizing the print image stream from the third computer, along with other data, to control the specific print engine to print desired documents containing variable information provided from the second computer database information." Computer four is locally connected at the same site to the print engine. Thus, the Dorfman system stores "the resource locally to the printer," and prints "the stored resource according to the layout information."

Dorfman does not expressly disclose a second layout information describing a second layout of the resource in the document, nor does he describe transforming the first identifier into the second identifier.

Shirakawa discloses a method of evaluating multiple layouts for document printing. Shirakawa discloses in column 3, lines 13-17, a "layout means for virtually setting rectangular columns on an area where documents are arranged, and searching for an unused sole column or compound column until said columns are filled with articles or all articles are completely arranged to attain layout results on articles which can be arranged." Therefore Shirakawa's system contains multiple layouts to be selected by a layout selection means, as disclosed in column 3, lines 25-28, a "best layout result retrieval means for selecting a layout result having the best evaluation

value given by said layout result evaluation means from said multiple layout results determined by said layout means."

Dorfman and Shiwakawa are combinable because they both deal with static image processing with regards to page layout.

Therefore it would have been obvious at the time of invention to one of normal skill in the art to include in Dorfman's impositioned document printing system a method of transmitting and selecting multiple or alternative layouts as taught by Shiwakawa.

The purpose of this modification would be to allow for user or computer selection of alternate layouts in printing impositioned documents.

Thus it would have been obvious at the time of invention to combine Dorfman with Shiwakawa to obtain the invention disclosed in claims 8, 18, and 28.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert N. Kang whose telephone number is (571) 272-0593. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (571)272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RNK

TWYLER LAMB
PRIMARY EXAMINER